Copy Elision Exercises

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Copy Elision

- Explain briefly what is meant by copy elision

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Function returning temporary object

- Write a simple class. Implement the copy constructor to display a message when called
- Which other special member functions do you need to implement, and why?
- Write a function which returns a temporary object of the class by value
- Write a program which calls this function and uses its result to initialize an object of the class
- How many times will the copy constructor be called?
- Run the program. Explain your observations

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Return Value Optimization

- Explain what is meant by "Return Value Optimization" and "Named Return Value Optimization"
- Write a simple program which demonstrates Named Return Value Optimization

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Other cases of copy elision

- Give some other examples of when copy elision can occur
- Write simple programs to demonstrate these examples

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